

WHAT IS CLAIMED IS:

5 1. An emergency reporting apparatus for a vehicle, comprising:  
a microphone;  
a loudspeaker;  
a handsfree system circuit;  
means for allowing handsfree two-way speech communication  
with an emergency report receiving center via the microphone, the  
loudspeaker, and the handsfree system circuit; and  
10 a volume control circuit connected to the loudspeaker for  
controlling a volume level of sound generated by the loudspeaker at  
a predetermined constant level or higher.

15 2. An emergency reporting apparatus as recited in claim 1,  
wherein the volume control circuit controls the volume level at the  
predetermined constant level, and inhibits a user from changing the  
volume level.

20 3. An emergency reporting apparatus as recited in claim 1,  
wherein the volume control circuit comprises means for controlling  
the volume level at the predetermined constant level during  
emergency reporting communication, and means for allowing a user  
to change the volume level.

25 4. An emergency reporting apparatus as recited in claim 1,  
wherein the volume control circuit comprises first means for

controlling the volume level at the predetermined constant level during emergency reporting communication, second means for allowing a user to change the volume level after the first means controls the volume level at the predetermined constant level, and  
5 third means for preventing the volume level from moving out of a predetermined range after the volume level is changed via the second means.

5. An emergency reporting apparatus as recited in claim 1,  
10 further comprising means for detecting a level of background sound noise inputted via the microphone, and means for controlling the volume control circuit to adjust the volume level of sound generated by the loudspeaker in response to the detected level of background sound noise.

6. An emergency reporting apparatus as recited in claim 1,  
15 further comprising means for receiving a volume level control signal from the emergency report receiving center, and means for controlling the volume control circuit to adjust the volume level of  
20 sound generated by the loudspeaker in response to the received volume level control signal.

7. An emergency reporting apparatus as recited in claim 1,  
25 further comprising means for receiving a volume level control signal from an external device, and means for controlling the volume control circuit to adjust the volume level of sound generated by the

8. A loudspeaker in response to the received volume level control signal.

8. An emergency reporting network system comprising:  
an emergency report receiving center;  
a communication network; and  
emergency reporting apparatuses connectable with the  
emergency report receiving center via the communication network;  
wherein each of the emergency reporting apparatuses  
comprises the emergency reporting apparatus of one of claims 1-7.

9. In a vehicle including an audio system, a method of reporting  
an emergency, comprising the steps of:  
allowing handsfree speech communication with an emergency  
report receiving center via a microphone and a loudspeaker; and  
using a loudspeaker of the audio system as the handsfree  
speech communication loudspeaker.

10. A method as recited in claim 9, wherein one of an audio-  
system loudspeakers located in a right front door, a right rear door,  
a left front door, a left rear door, a right portion of a rear seat, and a  
left portion of the rear seat of the vehicle is used as the handsfree  
speech communication loudspeaker.

11. A method as recited in claim 9, further comprising the step  
of, in cases where the loudspeaker of the audio system is wrong,  
replacing the loudspeaker of the audio system with another

loudspeaker of the audio system and thereby using another loudspeaker of the audio system as the handsfree speech communication loudspeaker.

5 12. A method as recited in claim 11, wherein the replacing step comprises the step of replacing the loudspeaker of the audio system with another loudspeaker of the audio system in response to user's manual operation.

10 13. A method as recited in claim 11, wherein the replacing step comprises the step of replacing the loudspeaker of the audio system with another loudspeaker of the audio system in response to a loudspeaker change requirement signal transmitted from the emergency report receiving center.

15 14. A method as recited in claim 13, wherein a DTMF signal is used as the loudspeaker change requirement signal.

20 15. A method as recited in claim 11, wherein the replacing step comprises the steps of detecting a level of sound generated by the loudspeaker of the audio system, and replacing the loudspeaker of the audio system with another loudspeaker of the audio system in response to the detected sound level.

25 16. A method as recited in claim 11, wherein the replacing step comprises the steps of detecting an impedance of the loudspeaker

5 of the audio system, deciding whether the loudspeaker of the audio system is normal or wrong in response to the detected impedance of the loudspeaker, and replacing the loudspeaker of the audio system with another loudspeaker of the audio system when the loudspeaker of the audio system is decided to be wrong.

17. An emergency reporting apparatus for a vehicle including an audio system, the apparatus comprising:

10 a microphone;

a loudspeaker;

a handsfree system circuit; and

means for allowing handsfree speech communication with an emergency report receiving center via the microphone, the loudspeaker, and the handsfree system circuit;

15 wherein the handsfree speech communication loudspeaker uses a loudspeaker of the audio system.

18. An emergency reporting apparatus as recited in claim 17, further comprising means for selecting one from among  
20 loudspeakers of the audio system as the handsfree speech communication loudspeaker.

19. An emergency reporting apparatus as recited in claim 18, wherein the selecting means comprises a unit manually operable by  
25 a user, and means for selecting one from among loudspeakers of the audio system as the handsfree speech communication loudspeaker

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